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OK
8-29-85
Dwy

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 1 - SITE INFORMATION AND ASSESSMENT		I. IDENTIFICATION 01 STATE 02 SITE NUMBER IL 002813871	
II. SITE NAME AND LOCATION			
01 SITE NAME (Legal, common, or descriptive name of site) Murvin Oil Co.		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER N 1/2 of Sect 1 T-4-N, R-7-E	
03 CITY Hoosier Twnshp	04 STATE IL	05 ZIP CODE 62450	06 COUNTY Clay
07 COORDINATES LATITUDE 38 49 24	LONGITUDE 088 22 47	08 COUNTY CODE 025	
09 COORDINATES DIST 19		Sailor Springs Quad 75 (214)	
10 DIRECTIONS TO SITE (Starting from nearest public road) see Attached Map			
III. RESPONSIBLE PARTIES			
01 OWNER (if known) Gerald Herdes		02 STREET (Business, mailing, residential) R.R. #2	
03 CITY Ingraham	04 STATE IL	05 ZIP CODE 62434	06 TELEPHONE NUMBER UNK
07 OPERATOR (if known and different from owner) Murvin Oil Co		08 STREET (Business, mailing, residential) Box 290	
09 CITY Olney	10 STATE IL	11 ZIP CODE 62450	12 TELEPHONE NUMBER UNK
13 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL: _____ (Agency name) <input type="checkbox"/> F. OTHER: _____ (Specify) <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> G. UNKNOWN			
14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply) <input type="checkbox"/> A. RCRA 3001 DATE RECEIVED: _____ MONTH DAY YEAR <input type="checkbox"/> B. UNCONTROLLED WASTE SITE (RCRA 103 c) DATE RECEIVED: _____ MONTH DAY YEAR <input checked="" type="checkbox"/> C. NONE			
IV. CHARACTERIZATION OF POTENTIAL HAZARD			
01 ON SITE INSPECTION <input type="checkbox"/> YES DATE _____ MONTH DAY YEAR <input checked="" type="checkbox"/> NO		BY (Check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: _____ (Specify)	
02 SITE STATUS (Check one) <input type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input checked="" type="checkbox"/> C. UNKNOWN		03 YEARS OF OPERATION BEGINNING YEAR _____ ENDING YEAR _____ <input checked="" type="checkbox"/> UNKNOWN	
04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED Oily Waste (Toxic) Heavy Metals (Soluble/Toxic/Persistent)			
05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION Ground Water (Population/Environment)			
V. PRIORITY ASSESSMENT			
01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents) <input type="checkbox"/> A. HIGH (Inspection required promptly) <input checked="" type="checkbox"/> B. MEDIUM (Inspection required) <input type="checkbox"/> C. LOW (Inspect on time available basis) <input type="checkbox"/> D. NONE (No further action needed, complete current disposition form)			
VI. INFORMATION AVAILABLE FROM			
01 CONTACT		02 OF (Agency/Organization)	
03 TELEPHONE NUMBER ()			
04 PERSON RESPONSIBLE FOR ASSESSMENT Richard Lange		05 AGENCY IEPA	06 ORGANIZATION HSCS
07 TELEPHONE NUMBER (217) 782-6760		08 DATE 08.27.85 MONTH DAY YEAR	



I HIGHLY VOLATILE
J EXPLOSIVE
K REACTIVE
L INCOMPATIBLE
M NOT APPLICABLE

EPA FORM 2070-12 (7-81)



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
ILD 002813871

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 600

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☒ POTENTIAL ☐ ALLEGED

Highly soluble brine waste placed for disposal in unlined lagoon. This practice has impacted private wells at similar facilities.

01 ☐ B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

01 ☐ C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

01 ☐ E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

01 ☒ F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: Unk
(Acres)

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☒ POTENTIAL ☐ ALLEGED

Loss of production (Ag land) & damage to soil structure has been noted at similar sites.

(See J following) (See 05 Other following)

01 ☒ G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☒ POTENTIAL ☐ ALLEGED

See A above

01 ☐ H. WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

01 ☐ I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
IL 002813871

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA

02 ☐ OBSERVED (DATE: _____)

☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

The near sterilization of soils (>5 acres), Attributed to increased soil salinity, has been noted at other similar sites.

(See F Above) (See 05 other following)

01 ☐ K. DAMAGE TO FAUNA

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION (Include name(s) of species)

01 ☐ L. CONTAMINATION OF FOOD CHAIN

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL ☐ ALLEGED

(Soils runoff standing liquids leaking drums)

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

01 ☐ N. DAMAGE TO OFFSITE PROPERTY

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

Site was infrequently inspected by regulatory agencies, Facility has now been backfilled making illegal dumping hard to detect.

☒ Q. DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

Denuding of soils by brines is deemed leading cause of soil erosion in several IL counties.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 600

IV. COMMENTS

MURVIN Oil CO
Address Unreported
Olney, IL 62450

Information as appears
on ERRIS (L-4)

V. SOURCES OF INFORMATION (List specific references, e.g., State files, sample analysis, reports)

S.I.A. study

EXECUTIVE SUMMARY

This site has been placed in the ERRIS data base as a result of its selection for Phase II evaluation during the federally funded Surface Impoundment Assessment (SIA) study of 1980. During ERRIS placement the operator name and business address were utilized from the SIA which results in deviations from ERRIS for actual site location, Part I section II items 02 through 08 of form 2070-12. This use of operator name and address has also led to one (1) ERRIS listing representing, in actuality, from one (1) to one hundred eight (108) actual brine pits at an equal number of separate locations.

Some considerable effort has been expended to select the site with highest, Phase II SIA, pollution potential where multiple sites are represented by a single ERRIS listing. One must keep in mind that the Phase II SIA represents no more than 7 percent of the brine pits identified in Illinois. Phase I identified more than 3200 pits where Phase II evaluated a random selection of less than 220. One must also maintain a realization that phase II pollution potential was determined by bench top study with little or no actual site visitation or monitoring.

Minimal to no file information exists on this site beyond that contained in Phases I and II of the SIA. There is no direct evidence of hazardous waste disposal at this site beyond the potentially hazardous constituents of Illinois Basin brines, but with only annual inspections by Illinois Mines and Minerals staff relevant to oil production practices and recent backfilling of most brine pits in Illinois, disposal of off site material of unknown nature is possible. A literature review and laboratory analysis of samples from two other sites indicate concern for contamination of groundwater/surface water by Sodium, Sulfate, Chloride etc. (Non-Hazardous Constituents), concern for heavy metals (i.e., Chrome, Vanadium, Barium) and long chain hydrocarbons.

A question arises as to the addressability of the heavy metals by CERCLA when one considers 40 CFR section 300.6 "Definitions - Federally Permitted Release (i)" and Section 101(10) of CERCLA. The statement "and which are reinjected" seems to allow CERCLA action, but interpretation and clarification by USEPA legal staff seems required. The long chain hydrocarbons would appear to be included in the exclusion given to crude oil and fractions thereof under 40 CFR section 300.6 "Definitions-Hazardous Substance" and 101(14) of CERCLA.

A medium priority has been assigned due to the potential impact of this site on groundwater in a rural area where private wells are generally the sole source for potable water. Similar sites have impacted private wells to a point requiring users to seek alternative sources for drinking water. A site inspection should be scheduled to verify/update owner-operator information and gain more thorough site specific information.

RML:bf/22

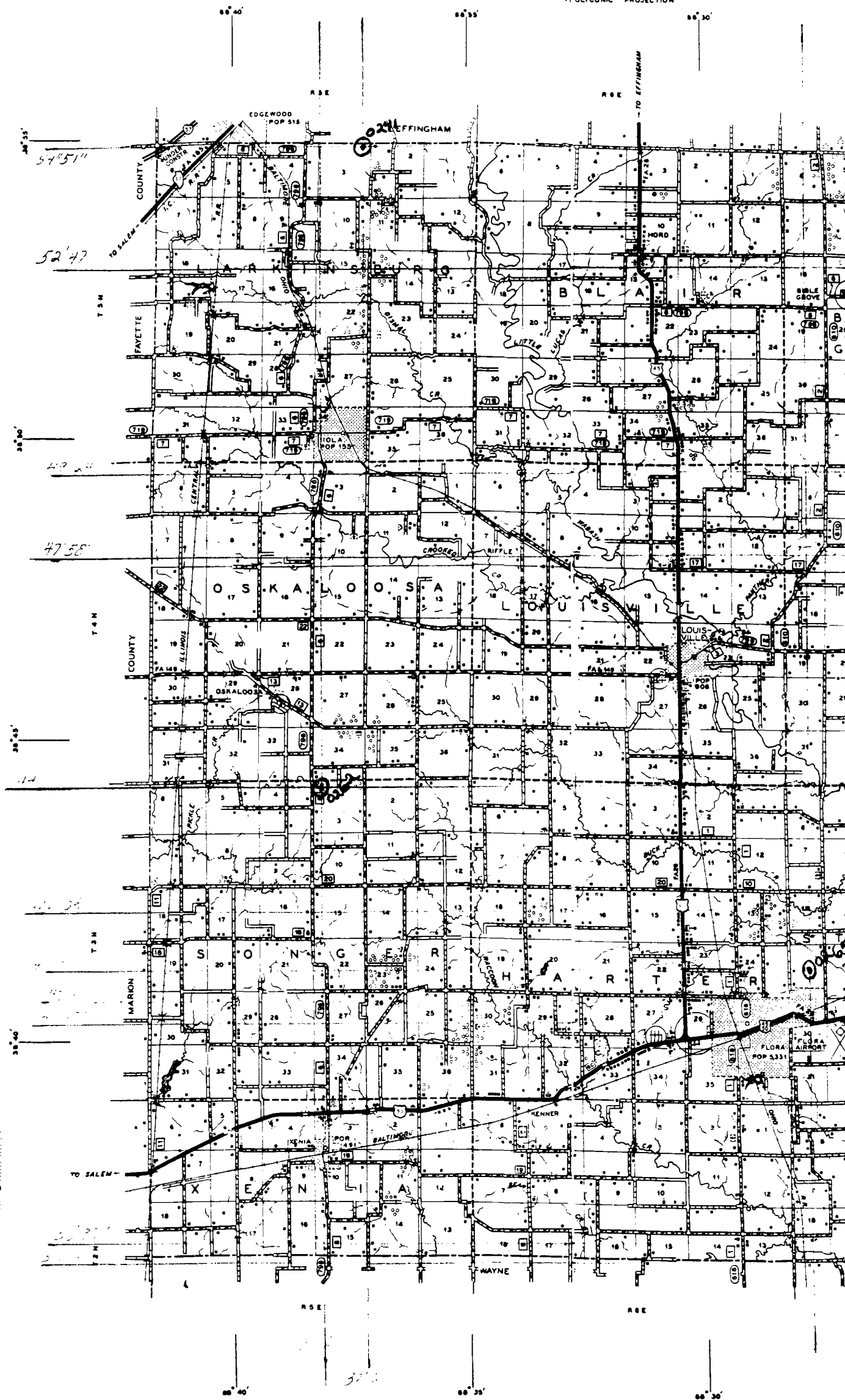
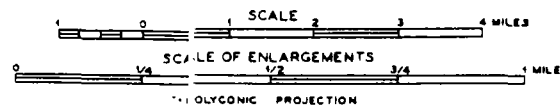


Diagram illustrating the scales used for the map:

- SCALE**: A horizontal line divided into four equal segments, labeled 1, 2, 3, and 4. The total length is marked as 4 MILES.
- SCALE OF ENLARGEMENTS**: A horizontal line divided into two segments, labeled $\frac{1}{2}$ and $\frac{3}{4}$. The total length is marked as 1 MILE.

	ROADS	ROADS	ROADS
FAIRWAYS	143	1,468	30
OTHER YEAR AROUND DWELLINGS	194	499	8
SEASONAL DWELLINGS	0	12	0
INDUSTRIAL PLANTS	5	2	0
BUSINESS ESTABLISHMENTS	49	44	0
SCHOOLS	1	5	0
CHURCHES	5	27	0
MISCELLANEOUS	10	69	3

Clay
County

